

City of Waterville
DEPARTMENT OF PUBLIC WORKS
6 Wentworth Court
Waterville, Maine 04901-4892

TEL (207) 680-4744 FAX (207) 877-7532

**REQUEST FOR BIDS
DUAL AXLE CAB/CHASSIS
(64,000 GVW) & ACCESSORY EQUIPMENT**

DATE: July 2, 2012

INSTRUCTIONS TO BIDDERS

- 1. GENERAL:** The City of Waterville is accepting bids for a Dual Axle Cab / Chassis (64,000 G.V.W.) and Accessory Equipment meeting the specifications accompanying this document.
- 2. BID SUBMITTAL: Sealed bids** will be accepted by the Office of the Director of Public Works, 6 Wentworth Court, Waterville, Maine 04901 up to and including **10:00 AM local time, Tuesday, July 24, 2012**, at which time they will be publicly opened and read. All bids will be placed in a sealed envelope clearly marked "**Bid – Dual Axle Cab / Chassis (64,000 G.V.W.) Truck & Accessory Equipment**" in the center with the bidder's name and address in the upper left hand corner. Bids not dated and time stamped by the Office of the Director of Public Works prior to the specified date and time stated above will be declared invalid and returned unopened.
- 3. WITHDRAWAL OR REVISION OF BID:** A bidder may withdraw or revise a bid after it has been received by the Office of the Director of Public Works, provided the request is made in writing or in person before the time set for bid opening.
- 4. BID AWARD:** Bid award, if the City determines to award, will be made within thirty (30) calendar days after bid opening, to the lowest responsible bidder whose bid fully complies with the requirements specified contingent upon approval by the City Council. The City reserves the right to reject any and/or all bids without absorbing any liability against the City.
- 5. EVALUATION OF BIDS:** For purposes of evaluating the bids, in the event of any discrepancies on a proposal between an amount written out in words verses the same amount expressed in numbers, the amount written in words shall govern (if applicable). Similarly, unit prices shall prevail over extended totals. In the event of Additive Bid Items, the "low bid" shall be based upon the least total for the highest combination of bid items which may be awarded within the Control Amount (i.e. a predetermined budget amount to be disclosed at the time of bid opening). In the event that all Base Bids exceed the Control Amount, the "low bid" shall be based solely upon the lowest Base Bid submitted. Bidders shall examine and familiarize themselves with the Specifications and Bid Documents. The bidder shall in no way be relieved of any obligation to provide the product, service and/or equipment specified through error, mistake or omission.

- 6. INTERPRETATION OF ADDENDA:** It shall be the bidder's responsibility to make inquiry as to any interpretation of the specifications or requirements of the participants. Any changes in the specifications shall be by written addenda.
- 7. SPECIFIED QUANTITY:** One (1) Unit
- 8. INVOICES AND PAYMENT:** Invoices shall be transmitted to the City of Waterville, 1 Common Street, Waterville, Maine 04901-6699. It is the practice of the City of Waterville to pay invoices within thirty (30) days of receipt. The City is exempt from State of Maine Sales Tax.
- 9. PENALTY CLAUSE:** N/A
- 10. INSURANCE:** N/A
- 11. PERFORMANCE BOND:** N/A
- 12. CANCELLATION:** The City reserves the right to cancel any unfulfilled portion of the Contract if, in the opinion of the City, the services or materials supplied are unsatisfactory or are not in compliance with the terms and conditions of the specifications. Cancellation shall be effective following ten (10) calendar days written notice to the Bidder.
- 13. EXCEPTIONS TO SPECIFICATIONS:** These instructions to Bidders and General Paragraphs are an integral part of the Specifications for a **Dual Axle Cab / Chassis (64,000 G.V.W.) Truck & Accessory Equipment** and will be binding on the Bidder. Bidders are advised that they shall be bound to the requirements of the Specifications, Instructions to Bidders and General Paragraphs unless exceptions are otherwise clearly noted in the Proposal. Any exceptions shall be considered, however, in determining the most acceptable proposal.
- 14. INQUIRIES:** Any questions concerning this bid request should be directed to Fred Dechaine, Department of Public Works, 6 Wentworth Court, Waterville, Maine 04901. Telephone inquiries can be made by calling (207) 680-4746 between the hours of 7:00 AM & 3:00 PM Monday thru Friday.
- 15. GENERAL PARAGRAPHS:** See attached **Bid Specifications**.

City of Waterville, Maine
BID SPECIFICATIONS
DUAL AXLE CAB/CHASSIS
(64,000 GVW)

GENERAL - It is the intent and purpose of these specifications to describe a standard production model heavy duty diesel powered 8 X 2 64,000 GVW cab and chassis truck. This vehicle will be equipped with a dump/sander body and full plow and wing assemblies and will be utilized during operations conducted by a municipal public works department. The bidder shall supply equipment that has been in production for one (1) year or greater in full compliance with these specifications.

All equipment furnished under this contract shall be new, unused and the same as the manufacturer's most current production model. Accessories not specifically mentioned herein, but necessary to furnish a complete unit ready for use, shall be all inclusive. The unit shall conform to the highest quality standards in overall design, quality of workmanship and materials. All assemblies, sub-assemblies and component parts shall be standard and interchangeable throughout the entire quantity of units as is specified in these bid specifications.

ENGINE - 375 H.P, or equivalent, generating minimum @ 2100 RPM with 1450 FTLB torque

- 1.) Inside/Outside air intake manifold
- 2.) Silicone cooling hoses with steel tube connectors
- 3.) On/off fan clutch
- 4.) Delco Remy© or equivalent 12V 42MT OCP starter
- 5.) Delco Remy© or equivalent 12V 145AMP 22SI HD Alternator
- 6.) Magnetic crankcase drain plug
- 7.) Two position engine brake with exhaust brake (or equivalent)
- 8.) Spin on secondary fuel filter
- 9.) Spin on water filter or with water conditioner
- 10.) Wabco© or equivalent 31.8 CFM air compressor
- 11.) Phillips© 120V 1500W or equivalent engine block heater.
- 12.) Electric heated manifold
- 13.) Engine mounted oil check and fill reservoir
- 14.) Front drive flange for PTO.

EXHAUST -

- 1.) Single outboard type vertical exhaust
- 2.) Single stainless exhaust shield
- 3.) Deflector cap
- 4.) HD mounting brackets, elbows, piping and expansion joints.

EMISSIONS - Engine and exhaust emissions system shall meet current EPA standards and will employ EGR or SCR technology, if applicable, compliant with these standards.

TRANSMISSION - ALLISON AUTOMATIC RDS 4500-6 Speed

- 1.) Synthetic based lubrication
- 2.) Air to oil type manual transmission cooler GCW 90,000 LBS or greater

- 3.) Shift lever noise isolator
- 4.) Spicer 1810HD or equivalent life driveline with XL U-joints.
- 5.) Magnetic drain plug

POWER DIVIDER -

- 1.) Torque proportioning type with driver actuated lock-out mechanism
- 2.) Magnetic drain plug

FRONT AXLE -

- 1.) Certified 20,000 LB minimum capacity
- 2.) 20,800 LB minimum flat leaf suspension
- 3.) Unitized front oil seals preferred
- 4.) Lifetime sealed wheel bearings preferred
- 5.) 2000 LB RH build up spring system

REAR AXLE -

- 1.) Certified 46,000 LB minimum capacity
- 2.) Main assembly to be Rockwell RT46-160P or equivalent
- 3.) 4.89 rear drive axle ratio
- 4.) Manual activated anti-spin full locking front and rear wheel differential
- 5.) Inter-axle differential lock
- 6.) Synthetic based lubrication
- 7.) Hendrickson© RT/RT2 460 or 46K T-Ride equivalent rear suspension
- 8.) Minimum 54" HD steel suspension beams
- 9.) Rubber bushed longitudinal torque rods
- 10.) Factory balanced HD drive line
- 11.) Positive axle alignment
- 12.) Off-highway articulation and oscillation characteristics
- 13.) Duplicate final drive ratio
- 14.) Single and dual tire chain clearance, minimum 2"
- 15.) Chicago Rawhide© or equivalent oil seals
- 16.) Oil lubricated and/or Uni-Hub Lifetime greased wheel bearings
- 17.) Magnetic drain plugs

AXLE DRIVELINE EQUIPMENT -

- 1.) Full activation main differential lockout
- 2.) Greased and sealed drag link and tie rod assemblies

CHASSIS -

- 1.) Set Back Axle with Cab to Axle and wheel base to be coordinated by Dealer and Body Company.
- 2.) 7/16" straight steel frame rails, single channel bolted construction
- 3.) Heat treated components, minimum strength rating 120,000 PSI
- 4.) Front reinforcement with under slung gusseted cross members
- 5.) 3,100,000 RBM rating with single frame rail desired
- 6.) Flange bolted frame fasteners
- 7.) Minimum 56" rear frame overhang with straight rear frame cut off
- 8.) Push/Pull type brake valves

- 9.) Manual pull cord drain valves on all air tanks
- 10.) Minimum 75 gallon LH aluminum fuel tank with factory installed Webb or equivalent fuel pre-heater
- 11.) SAE J844 nylon tube fuel lines
- 12.) RH mounted steel (3 batteries @ 2850 CCA) - box with aluminum lid.
- 13.) Trailer connections mounted end of frame/Detachable trailer cable. Electrical receptacle on end of frame. Full pressure trailer brake hand control.

BRAKE SYSTEM -

- 1.) Full air actuation
- 2.) Minimum 31.8 CF compressor lubricated through engine lubrication system
- 3.) Filtered air inlet on compressor unit
- 4.) Minimum reservoir capacity 3,000 cubic inches
- 5.) Drain cocks on each reservoir
- 6.) Wabco© or equivalent air dryer system
- 7.) 16.5 X 6 S -CAM Eaton ES-165-6L or equivalent front brakes
- 8.) Rockwell© or equivalent automatic front and rear slack adjusters
- 9.) 16.5 X 7 S-CAM Eaton ES-165-7D tandem axle or equivalent rear brakes
- 10.) Bendix© or equivalent antilock brake system
- 11.) Front and rear brake dust shields
- 12.) Brakes to be equipped with pressure relief valve
- 13.) Low pressure alarm system with indicator located on instrument panel

FRONT TIRES -

- 1.) Goodyear© or equivalent 385/65R22.5J 18 ply tubeless radial
- 2.) 22.5 X 12.25 Accuride© or equivalent rims with hub piloted wheels
- 3.) Cast iron brake drums with aluminum hubs
- 4.) Deep inset wheel for better turning radius
- 5.) Matching front wheel & tire
- 6.) Matching spare front wheel & tire

REAR TIRES -

- 1.) Goodyear© G164 RTD or equivalent 11R22.5G 14 ply tubeless radial
- 2.) 22.5 X 8.25 Accuride© or equivalent rims with hub piloted wheels
- 3.) Cast iron brake drums
- 4.) Matching rear wheel & tire
- 5.) Matching spare rear wheel & tire

STEERING SYSTEM –

- 1.) Heavy duty design with sufficient gear reduction for off-highway operation
- 2.) Large capacity power steering fluid reservoir with changeable filter unit
- 3.) Dual power steering boxes rated for front end capacity of 20,000 LBS

CAB EXTERIOR -

- 1.) Conventional day cab with corrosion inhibitor sub-base
- 2.) Fiberglass hood with engine access panel
- 3.) Painted stationary front grille with bug screen mounted behind
- 4.) Rubber front fender extensions
- 5.) Dual rectangular air horns with shields
- 6.) Heated mirrors equipped heated convex mirrors LH RH
- 7.) Down view mirror mounted over passenger door
- 8.) Mirror arms for 102" trailer
- 9.) Full fiberglass sun visor mounted over windshield
- 10.) Safety glass windows, rear cab glass and tinted windshield
- 11.) One piece windshield
- 12.) Dual windshield wiper/washer with intermittent feature
- 13.) Back up alarm system mounted rear of chassis
- 14.) LH/RH cab grab handles, (Interior preferred)
- 15.) Driver/passenger cab access step maximum height of 21" from ground

CAB INTERIOR -

- 1.) Mid-tone gray color trim
- 2.) Metal components to be painted cab color
- 3.) Thermal insulation kit
- 4.) Standard cab heating and integral a/c system
- 5.) Driver & Passenger Side Power Windows
- 6.) Door mounted LH/RH armrest
- 7.) Mat floor covering with foam back
- 8.) LH and RH door storage pocket
- 9.) Driver side air bag desired for safety
- 10.) Standard tunnel mount ashtray/cigarette lighter
- 11.) Fully illuminated standard instrumentation panel cluster
- 12.) Speedometer, tachometer, hour meter and odometer to be electronic
- 13.) National© or equivalent air suspension high back with lumbar and seat back adjustments (or equivalent) drivers and passenger seat
- 14.) Three point retractable safety belt system.
- 15.) 18 inch diameter sport steering wheel with tilt and telescopic steering column
- 16.) LH/RH color keyed sun visors
- 17.) Audible/visual alarm shutdown for low oil pressure, engine over heat and low water level with automatic override.
- 18.) Graduated air restriction gauge with dash warning indicator light
- 19.) Main transmission gauge with dash warning indicator light

LIGHTING -

- 1.) Blade fuse circuit protection
- 2.) Daytime running lights
- 3.) SAE Class A front turn signal lights
- 4.) Five (5) amber marker lights
- 5.) Parking lights integral with front turn signal lights
- 6.) Dual stop and tail lights with integral back up lights
- 7.) SAE Class A rear turn signals integral with tail light system
- 8.) Self-canceling turn signal switch with motorized flasher

MISCELLANEOUS
EQUIPMENT -

- 1.) AM/FM stereo radio
- 2.) Two dual cone speakers
- 3.) Power and ground connections for radio units
- 4.) Roof mounted factory (2) warning lights
- 5.) Dry type ABC 5 LB rechargeable fire extinguisher mounted in cab
- 6.) Three (3) pack emergency triangular reflector kit mounted in cab
- 7.) Common door/ignition key
- 8.) Outside temperature gauge
- 9.) Operators & Maintenance Manuals
- 10.) Floor Mats
- 11.) Rain Guards on both doors
- 12.) Filters for first service

FINISH -

- 1.) Chassis color - Black - primed and undercoat protection
- 2.) Cab color - Orange S/W 42139 (or equivalent) - primed and undercoat protection
- 3.) Front bumper color - Argent Silver S/W 48494 (or equivalent)

ACCESSORY
EQUIPMENT –

SUBORDINATE BID SPECIFICATIONS
One 12 -14 CY SIDE DUMP SPREADER
(Furnished and Installed)

GENERAL - It is the intent and purpose of these specifications to describe (1) one standard production model multi-purpose **12- 14 Cubic Yard Side Dump Spreader** for highway and other construction activities. All equipment furnished under this contract shall be new, unused and the same as the manufacturer's current production model. Accessories not specifically mentioned herein, but necessary to furnish and install a complete unit ready for use, shall be included. Unit construction shall conform to the best practice known to the body trade in design, quality of material and workmanship. Assemblies, sub-assemblies and component parts shall be standard and interchangeable throughout the entire quantity of units produced by the manufacturer. All units shall conform to the highest level of strength, quality and workmanship that is provided, in general, as an industry-wide standard.

TYPE- Canadian Unibody, U. S. Standard or equivalent design.

SIZE - Length 13 FT; Width 8 FT

CONSTRUCTION -

Minimum Requirements as follows:

- 1.) Body front, sides & tailgate shall consist of 3/16" Cor-Ten®, or equivalent, corrosion resistant, high tensile, non-spliced steel plate.
- 2.) Floor and Conveyor cover of ¼ QT-400 (185,000 PSI) Steel
- 3.) Cross members shall be 3" I-Beam & C- Channel.
- 4.) Long sills shall be 10" structural channel at 25.4 lb/ft.
- 5.) Side bracing shall be 3" facing tapered to 9" where meets the side and 13"x5" rear corner post.
- 6.) There shall be a full stationary passenger side panel for strength.
- 7.) Top rails shall be 4" X 4"x1/4" tubing with a 18" sideboard gussets.
- 8.) Rub rails shall be dirt-shedding and formed with side plate.
- 9.) Tailgate shall be double-acting with flame cut HD hardware, dirt-shedding bracing, air operated gate latch and 3/8" spreader chains.
- 10.) 88K Conveyor shall be 24,000 lb. open pintel dragchain powered by a hydraulic motor coupled with a direct drive 25:1 worm reducer which discharges through a metered volume gate. Three piece conveyor cover shall be hinged to fold and latch to sidewall.
- 11.) Spinner shall be 18" in diameter molded rubber adjustment capability. Adjustable chute for varied spreading patterns and concentrations. Hydraulic powered.
- 12.) Hoist shall be front mounted floating trunnion telescope. Capacity - 3 tons.

- 13.) Side tilt unit shall be designed to allow floor and right side to operate as one assembly. Tilt actuation will be governed by two (2) right hand double acting cylinders with factory plumbed oil flow divider to ensure equal oil flow to each cylinder regardless of weight distribution on floor.
- 14.) All moving parts shall have grease fittings.
- 15.) Ground Speed Sander Control w/Base Station Software compatibility. The Department is currently using Cirrus Spreadsmart®, but other acceptable alternatives will be considered.
- 16.) Hydraulic Drive liquid Calcium Package with Ground Speed Control, 70 Gallon Polymer Calcium Tank.
- 17.) LED Strobes in Rear Corner Posts.
- 18.) Back Up Camera zone defense with 5" Monitor w/lcd camera
- 19.) Add camera for Wing

- ACCESSORIES - Mud flaps (4 – 36") for each unit
Rear corner, high intensity safety lights & reflectors
Cab mounted "Body Raised" indicator light
Hoist control lever lock-out system
Safety body props
8" apron to keep rear lights free of materials/debris
25 Ton Pintle Hook
Install wing light, switch operated
Install spinner light, switch operated
Install two back up lights on tow plate
Trailer Plug - Cole Hersee #12063
- PAINT - Primer coat to be minimum of two (2) applications rust resistant.
Finish coat to be minimum two (2) applications Orange S/W 42139 (or equivalent).
- INSTALLATION - By Bidder. To commence upon delivery of truck chassis by dealership and returned to Public Works Department.
- TRAINING - Bidder shall supply a minimum of four (4) hours on-site training.
- WARRANTY - Manufacturer's Standard
- SPECIAL
CONDITIONS - OEM parts, service and operator's manuals to be provided.

**SUBORDINATE BID SPECIFICATIONS
HEAVY DUTY PLOW OUTFIT
(Furnished & Installed)**

GENERAL - It is the intent and purpose of this specification to describe a **Heavy Duty Plow Outfit**. This equipment shall be designed and built for exceptional performance under difficult conditions requiring high speed snow removal. All equipment furnished under this contract shall be new, unused and the same as the manufacturer's current production model. Parts/Accessories, not specifically mentioned herein, but necessary to furnish a complete unit ready for use, shall be included. All units shall conform to the highest standards of strength, quality and workmanship that is provided, in general, by the related manufacturing industry.

PLOW
BLADE - American Model 4512P1SA-RR85© or equivalent polymer reversible trip-edge 12' X 45" moldboard with reversing ram type cylinders. C1090 or equivalent cutting edge of 5/8" X 8" stock covering Kennametal Carbide Blade or equivalent with replaceable wear shoes mounted behind the cutting edge.

WING - American Model 1242 TERA© (12FT) or equivalent, Trip-Edge Wing with C1090 or equivalent cutting edge of 5/8" X 6" stock equipped with replaceable wear shoe on discharge end of wing, Heavy Duty Wing Braces.

FRONT - Hydraulic Tilt & Detach Front Hitch, Heavy Duty Components to include 4"x 6"X 3/8" rectangular tubing hitch cross tubes with flanges for front wing post, 4"x4"x1/2" angle iron uprights, tilt function to be direct lift without use of chain, 4"X14" double acting lift cylinder

WING
TOWER - American Model 714© wing tower or equivalent equipped with cable lift on rear of wing, bolt on rear wing post for easy removal, bolt on 66" cable lift front post assembly for easy removal, bolt on 2 1/2" Schedule #80 pipe bracing, 30 gallon reservoir integrated into rear wing tower, integrated enclosure for control valves in rear tower.

HYDRAULICS - Rexroth A10© or equivalent variable displacement pump with Gresen© or equivalent load sensing valves. Full power hydraulic controls with (2) additional self-centering valves to operate side dump body. All controls to be cab mounted Del Hydraulics© air controls, or equivalent. **Note - Location of all valves and controls shall be

approved by a designated representative of the Waterville Public Works Department.

Lines, pipes, hoses and fittings shall be of adequate capacity to accommodate circulation of hydraulic fluids without causing undue heat buildup. All high pressure lines shall be heavy duty equipped with swivel connectors on all ends. All low pressure lines shall be oil resistant type with flexible wire filler and wear resistant outer casing. Long runs of line shall be **Stainless Steel**, adequately supported and secured.

PAINT - Primer coat to consist of minimum two (2) applications rust resistant paint.
Finish coat to consist of minimum two (2) applications Orange S/W 42139 (or equivalent)

MAINTENANCE

SUPPLIES - Two (2) extra sets of the following shall be furnished:

- a. Wing Edge – 5/8"X6"X12'
- b. Moldboard Edge – Carbide With Cover Edge
- c. All Shoes

SPECIAL

CONDITIONS -

Bidder to furnish all OEM Parts, Service and Operators manual for each product.

WARRANTY - Manufacturer's standard.

INSTALLATION -

By bidder. To commence upon delivery of truck chassis by dealership and returned to Waterville Public Works Department upon completion.

BID FORM

DATE: _____

To the Director of Public Works for the City of Waterville, Maine:

Please accept this bid submission from

(hereinafter called "Bidder"), a corporation* organized under the laws of the State of _____ or a partnership/individual** doing business as _____.

This bid is being submitted for a **Dual Axle Cab / Chassis (64,000 GVW) & Accessory Equipment** in compliance with your invitation for bids, having examined the specifications and conditions contained therein. Alternatives/Substitutions are as follows:

(Attach Additional Comments, As Necessary)

The Bidder proposes to supply the following:

Bid Option #1: Dual Axle Cab / Chassis (64,000 G.V.W.) & Accessory Equipment
(Per Specifications)

\$ _____

Bid option #2: With Trade-In Allowance - 1999 VOLVO WG64 Dual Axle Cab / Chassis 13' Everest Side Dump and a Heavy Duty Plow and Wing

\$ _____

Bid option #3: Extended Warranty: Provide Description
Summary

\$ _____

**Delivery Guaranteed within _____ days of contract award and not beyond ninety (90) days of contract award.

NAME OF BIDDER: _____
BY: _____

(Signature)

NAME AND TITLE: _____
ADDRESS: _____

TELEPHONE: _____ TAX ID# _____

* Affix seal if by Corporation

**Cross out word/phrases that do not apply